

Topics for EPA Principals Discussion on Oak Ridge EMDF ROD

Below is a summary of the two issues that need to be discussed by the Principals along with an update on DOE's public outreach and public comment plans.

1. **Instream water quality values and associated effluent limits.** The Administrator's Decision states that the Record of Decision (ROD) should contain the effluent discharge limits. Effluent discharge limits are based on compliance with risk-based instream water quality values and depend on engineering inputs. To calculate the effluent discharge limits, specific information is needed in addition to the risk-based instream water quality values such as where the pipe will discharge and the assimilative capacity at that location, the rate of discharge, batch vs continuous discharge, etc. All of this information/data will not be available until the remedial design is completed. A decision is needed on the most appropriate option for providing DOE to revise the FFS and ROD.
 - a) The request is to include the risk-based water quality values in the public information and the ROD but postpone calculation of the effluent discharge limits until the engineering inputs are available (to be included in a post-ROD primary document subject to EPA approval and FFA provisions). The risk-based instream water quality values for radionuclides, similar to the chemical AWQCs, would be included in the ROD; CWA NPDES regulations are ARARS and would be used to calculate the effluent discharge limits.
 - 1) Pro: Can be accomplished with available data and information and would not require estimates in the ROD that would have to be modified when the actual Remedial Design information is available. Would follow the same process used for chemical contaminants.
 - 2) Con: Does not follow the complete direction of the Administrator's Decision which states effluent limits should be included in the ROD. Would not require public comment on the final effluent limits unless EPA specifies in the ROD that public comment is required on the future primary document.
 - b) Require DOE to estimate information needed to calculate effluent limits even though the actual data will not be available until the Remedial Design is completed.
 - 1) Pro: Follows the Administrator's Decision. It places the effluent limits in the ROD.
 - 2) Con: An AROD, including EPA Administrator's signature, would be required after the Remedial Design is complete to modify the values used in the ROD. Would require values to be entered in a ROD that are estimated and that EPA knows would have to be modified at a later date.
2. **Use of site-specific exposure assumptions in calculating the risk-based instream water quality values (i.e., preliminary remediation goals (PRGs)) instead of using Clean Water Act (CWA) guidance and default exposure assumptions.** There are only two exposure assumptions that differ from the CWA defaults, the years of exposure and the fish consumption rate.
 - a) The Administrator's Decision is clear that site-specific assumptions can be used in lieu of CWA guidance defaults. Region 4 Superfund, TDEC, and DOE have worked together on a site-specific study and have developed a scientifically justified, site-specific fish consumption rate for recreational fishing in Bear Creek (11 8-ounce fish meals per year). Also, all parties have agreed to the CERCLA default of 26 years exposure duration. The landfill is predicted to operate for about 20 years, when the last cell will close. Discharge will cease shortly after landfill closure. This approach also includes risk associated with radionuclide progeny to be fully protective.
 - 1) Pro: This follows the Administrator's Decision, is based on robust scientific data, is site-specific with conservative inputs, follows CERCLA risk assessment protocols, and may be agreeable by DOE.

- 2) Con: This does not follow CWA guidance for conducting fish consumption surveys. Further, CWA uses an exposure duration of 70 years to establish national water quality criteria, whereas this approach uses the CERCLA default of 26 years to develop site-specific risk-based instream water quality values.

Update on Public Outreach and Participation:

While DOE believes it has complied with the public participation requirements of the NCP, DOE has agreed to further public involvement (in DOE's view this is voluntary). The public engagement plans are as follows:

1. The information for public review and comment will be taken from the draft ROD document, the FFS revision, and agreed upon revisions to both documents.
2. The information provided for public review and comment will be in the form of three Fact Sheets, one on each of the following topics:
 - a. Waste Acceptance Criteria (WAC),
 - b. Discharge Limits (mercury and radionuclides), and
 - c. Site selection (groundwater levels, plan for the Post-ROD demonstration involving groundwater levels and associated design basis, and ARAR waivers/exemptions, etc.).
3. The information provided for public review and comment (i.e., Fact Sheets) will be reviewed and approved by the FFA parties. A DOE, EPA and TDEC working group has been convened.
4. General EMDF information, as well as the three Fact Sheets will be provided online and presented in a virtual public meeting. A 30-day public comment period will be held and responses to comments will be included in the Responsiveness Summary of the ROD.
5. Public comment received during this period will be captured in a responsiveness summary.
 - a. If there are no comments that alter remedy selection and schedule permits, the responsiveness summary will be captured in the final version of the EMDF ROD.
 - b. If public comment is deemed to require a change to the selected remedy, then DOE will consult with TDEC and EPA on a path forward.
6. The formal 30-day public comment period will begin with notice as usually conducted under the FFA. The virtual public meeting will be held as early as possible during the public comment period.